

What is claimed is:

1. A data processing system comprising:

a data accumulating means to accumulate virtual space data as a set of 3-dimensional data specifying shape,

a coordinate system setting means to set a virtual reference point and virtual coordinate axes in said virtual space,

a detecting means to detect a relative position and a gradient in a real space,

a position specifying means to specify virtual positions in said virtual space in accordance with said position data detected by said detecting means,

an area selecting means to select a desired area in said virtual space in accordance with said virtual positions specified by said position specifying means, and

a storing means to store an image of said desired area selected by said selecting means.

2. The data processing system according to claim 1 wherein said detecting means has a gyro-sensor.

3. The data processing system according to claim 1 wherein said detecting means has an optical gyro-sensor and velocity sensors.

4. The data processing system according to claim 1 wherein said detecting means has:

a laser light source,

galvano-mirrors to distribute the laser light,

prisms to reflect the distributed laser light,  
a photo-detector to receive the reflected light by the  
prisms, and

angle detectors to detect the respective moved angles of  
the galvano-mirrors.

5. The data processing system according to claim 1  
wherein said 3-dimensional data further includes data on  
color, dimension and texture.

6. A printer comprising;

a data accumulating means to accumulate virtual space  
data as a set of 3-dimensional data specifying shape,

a coordinate system setting means to set a virtual  
reference point and virtual coordinate axes in said virtual  
space,

a detecting means to detect a relative position and a  
gradient in a real space, and

a printing means to print a desired area in said virtual  
space specified by said position data detected by said  
detecting means specified by said virtual reference point  
and coordinate axes.

7. The printer according to claim 6 wherein said  
detecting means has a gyro-sensor.

8. The printer according to claim 6 wherein said  
detecting means has an optical gyro-sensor and velocity  
sensors.

9. The printer according to claim 6 wherein said  
detecting means has;

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a laser light source,  
galvano-mirrors to distribute the laser light,  
prisms to reflect the distributed laser light,  
a photo-detector to receive the reflected light by the  
prisms, and

angle detectors to detect the respective moved angles of  
the galvano-mirrors.

10. The printer according to claim 6 wherein said 3-dimensional data further includes data on color, dimension and texture.

11. An image recording system comprising;

a data accumulating means to accumulate virtual space data as a set of 3-dimensional data specifying shape,

a coordinate system setting means to set a virtual reference point and virtual coordinate axes in said virtual space,

a detecting means to detect a relative position and a gradient in a real space,

a position specifying means to specify virtual positions in said virtual space in accordance with said position data detected by said detecting means,

an area selecting means to select a desired area in said virtual space in accordance with said virtual positions specified by said position specifying means, and

a printing means to print said selected desired area in said virtual space.

12. The image recording system according to claim 11

wherein a gyro-sensor is used in said detecting means.

13. The image recording system according to claim 11 wherein an optical gyro-sensor and velocity sensors are used in said detecting means.

14. The image recording system according to claim 11 wherein:

a laser light source,

galvano-mirrors to distribute the laser light, prisms to reflect the distributed laser light,

a photo-detector to receive the reflected light by the prisms, and

angle detectors to detect the respective moved angles of the galvano-mirrors are used in said detecting means.

15. The image recording system according to claim 11 wherein said 3-dimensional data further includes data on color, dimension and texture.

16. An image recording method comprising steps of:

accumulating virtual space data as a set of 3-dimensional data specifying shape,

setting a coordinate system by setting a virtual reference point and virtual coordinate axes in said virtual space,

detecting a relative position and a gradient in a real space,

specifying virtual positions in said virtual space in accordance with said position data detected by said detecting step,

selecting a desired area in said virtual space in accordance with said virtual positions specified by said position specifying step, and

printing said selected desired area in said virtual space.

17. The image recording method according to claim 16 wherein a gyro-sensor is used at said detecting step.

18. The image recording method according to claim 16 wherein an optical gyro-sensor and velocity sensors are used at said detecting step.

19. The image recording method according to claim 16 wherein;

a laser light source,

galvano-mirrors to distribute the laser light, prisms to reflect the distributed laser light,

a photo-detector to receive the reflected light by the prisms and

angle detectors to detect the respective moved angles of the galvano-mirrors are used at said detecting step.

20. The image recording method according to claim 16 wherein said 3-dimensional data further includes data on color, dimension and texture.

21. A data processing system comprising;

a data accumulating means to accumulate virtual space data as a set of 3-dimensional data specifying shape,

a coordinate system setting means to set a virtual reference point and virtual coordinate axes in said virtual

space,

a virtual position detecting means to detect a relative position and a gradient against said virtual reference point,

a moving means to move in said virtual space,

an area selecting means to select a desired area in said virtual space in accordance with changed values caused by said moving action of said moving means detected by said detecting means, and

a storing means to store an image of said desired area selected by said selecting means..

22. The data processing system according to claim 21 wherein said moving means has:

rollers,

a counting member to count rotated amount of said rollers,

a controlling member to control rotating velocity of said rollers,

supporting members formed monolithically with said rollers to support a heavy load,

a measuring member to measure said load to the supporting members, and

a space adjuster to adjust a space between said rollers and said supporting members in accordance with said measured load value by said measuring member.

23. The data processing system according to claim 21 or claim 22 wherein said virtual space moving means has a measuring member to measure said space between said

rollers and said supporting members.

24. The data processing system according to one of the claims 21 to 23 wherein said moving means also functions as a detecting means to detect a position in said virtual space.

25. The data processing system according to one of the claims 21 to 24 wherein said data processing system has a plurality of moving means in said virtual space.

26. The data processing system according to claim 21 wherein said 3-dimensional data further includes data on color, dimension and texture.